

Mussel Survey Scope of Work Summary Sheet 2015

Form Date: 4/20/2015

Project Title: Charleston Sanitary Board Outfall Mussel Survey

Project Company: Charleston Sanitary Board

Mussel Contractor: _____

Lead Malacologist: Sarah Horton

Project Contractor: _____

(if Mussel Contractor sub-contracting)

Divers: if applicable John King, Dave Chaney, George Dasher

lead diver that can provide QA/QC survey effort

County: Kanawha

Group (Circle One): 1 2 3 4

Stream: Kanawha River

If Group 1 or 2, Receiving Stream: _____

NOTE: Watershed Area < 10sq mi US of ADI, no survey needed, unless Group 2 (1/2)

Project Type: Group 4 Outfall

(corresponds to Table 3, WV Mussel Survey Protocol)

ADI Length: NA

ADI Width: NA

Salvage area: _____

US Buffer Length: 10 m

US Buffer Width: 100 m

US Buffer Length: _____

DS Buffer Length: 100 m

DS Buffer Width: 100 m

DS Buffer Length: _____

Lateral Buffer Length: 110 m

Lateral Buffer Width: 10 m

Lateral Buffer Width: _____

Phase 1 Survey Method: Transect ☒ Cells ☐ Other ☐

Transects/Length (m):

Cell Size (mxm):

Cell Search Effort (Min/m²)

1/100

ADI: _____

Minimum search effort for cells is

1/100 m

USB: _____

0.2min/m² if no mussels are found or

10/100 m

DSB: _____

0.5min/m² if any mussels are found

10 m Spacing Between Transects (M)

Coordinates (Decimal Degrees, NAD83)

Upstream End US Buffer: Long. 38.371767 Lat. 81.678342

Upstream End ADI: Long. 38.371869 Lat. 81.6784

ADI Center: Long. _____ Lat. _____

Downstream End ADI: Long. 38.371872 Lat. 81.678583

Downstream End DS Buffer: Long. 38.372347 Lat. 81.679419

Map: Show ADI, USB, DSB and survey layout

Did you provide? Justification must be provided in scope of work

Addressed Alternative Methods ☒ Yes

Provide Description in Scope

Addressed Alternative Sites ☒ Yes

Provide Description in Scope

Phase 2 Methods (Group 2):

Quadrats excavated _____

Be sure to define area on Map/Diagram

Salvage area only

Request for Relocation: ☐ Yes ☒ No

Method:

(check one) ☒ Cell Size (mxm): _____

Cell Search Effort (Min/m²) _____ (minimum)

☐ Moving Transect: _____

☐ Other: _____

until less than 5 % of the number collected on the original pass are recovered on the final pass or less than 2 mussels on last pass.